Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application:

Claim Listing:

1. (Original) A viable GGTA1 null swine.

2. (Original) A swine according to claim 1 wherein the swine is a miniature swine.

3. (Original) A method of selecting GGTA1 null cells comprising the steps of:

   (a) obtaining a line of cells obtained from a GGTA1 heterozygous pig or fetus;

   (b) enriching the cells for GGTA1 null cells; and

   (c) scanning the line for viable GGTA1 null cells.

4. (Original) The method of claim 3 wherein in step (b), the cells are enriched by at least one treatment selected from the group consisting of:

   (a) treating the said cells with anti-galactose-α(1,3)-galactose antibodies, in the presence of complement;

   (b) depleting the said cells with magnetic micro-beads bound with anti-gal reagents;

   (c) treating the said cells with anti-galactose-α(1,3)-galactose antibodies and depleting the said cells with magnetic micro-beads bound with anti-antibodies; and

   (d) treating the said line with gal epitope ligands and depleting the said line with magnetic micro-beads bound with anti ligand antibodies.

5. (Original) The method of claim 3 wherein in step (b), the cells are enriched by multiple treatments selected from the group consisting of:

   (a) treating the said cells with anti-galactose-α(1,3)-galactose antibodies, in the presence of complement;

   (b) depleting the said cells with magnetic micro-beads bound with anti-gal reagents;

   (c) treating the said cells with anti-galactose-α(1,3)-galactose antibodies and depleting the said cells with magnetic micro-beads bound with anti-antibodies; and

   (d) treating the said cells with gal epitope ligands and depleting the said line with magnetic micro-beads bound with anti ligand antibodies.

6. (Original) The method of claim 3 wherein in step (b), the cells are enriched by three treatments of each of the following:

   (a) treating the said cells with anti-galactose-α(1,3)-galactose antibodies, in the presence of complement;

   (b) treating the said cells with gal epitope ligands and depleting the said line with magnetic micro-beads bound with anti ligand antibodies.

7. (Original) The method according to any of claims 3-6 wherein the line of cells is a line of porcine fetal fibroblast cells.

8. (Original) The method according to any of claims 3-6 wherein the line of cells is a clonal population of porcine fetal fibroblast cells.

9. (Currently Amended) The method of claim 7 ~~or 8~~ wherein the porcine fetal fibroblast cells originate from miniature swine.

10. (Original) The method according to claim any of claims 3-6 wherein the line of cells is a line of stem cells.

11. (Original) The method of claim 10 wherein the stem cells are primordial stem cells.

12. (Original) The method according to any of claims 4-6 wherein the anti-galactose-α(1,3)-galactose antibodies are primate antibodies.

13. (Original) The method according to any of claims 4-6 wherein the anti-galactose-α(1,3)-galactose antibodies are monoclonal antibodies or fragments thereof.

14. (Original) The method according to any of claims 4-5, wherein the anti-gal reagents are selected from a group consisting of anti-galactose-α(1,3)-galactose antibodies and lectin.

15. (Original) The method according to any of 4-6, wherein the gal epitope ligands are IB4 conjugates and the anti-epitope ligands are anti-IB4 conjugates.

16. (Original) The method according to claim 15 wherein the IB4 conjugates are selected from a group consisting of IB4 biotin and IB4-FITC and the anti-IB4 conjugates are selected from a group consisting of anti-biotin and anti-FITC.

17. (Original) A porcine GGTA1 null cell.

18. (Original) The porcine cell according to claim 17 wherein the said cell is homozygous for the GGTA1 gene, and wherein the said GGTA1 gene is disrupted or rendered non-functional.

19. (Original) The porcine cell according to claim 17 wherein the said cell is hemizygous for the GGTA1 gene, and wherein the only single GGTA1 allele is disrupted or rendered non-functional.

20. (Original) The porcine cell according to claim 17 wherein the said cell is compound heterozygous for the GGTA1 gene, and wherein the said GGTA1 gene comprises two different mutant alleles.

21. (Original) The porcine cell according to claim 17 wherein the said cell is from Q2.

22. (Original) The porcine cell according to claim 17 wherein the said cell is from Q9.

23. (Original) The porcine cell according to claim 17 wherein the said cell is from Q32.

24. (Original) The porcine cell according to claim 17 wherein the said cell is from Q37.

25. (Original) A porcine organ lacking expression of galactose-α(1,3)-galactose epitopes.

26. (Currently Amended) A porcine organ according to claim ~~26~~ 25 wherein the said organ comprises cells homozygous for the GGTA1 gene, and wherein the said GGTA1 gene is disrupted or rendered non-functional.

27. (Currently Amended) A porcine organ according to claim ~~26~~ 25 wherein the said organ comprises cells hemizygous for the GGTA1 gene, and wherein the only single GGTA1 allele is disrupted or rendered non-functional.

28. (Currently Amended) A porcine organ according to claim ~~26~~ 25 wherein the said organ comprises cells which are compound heterozygote for the GGTA1 gene, and wherein the said GGTA1 gene comprises two different mutant alleles.

29. (Original) The porcine organ according to any of claims 25-28 wherein the porcine organ is selected from a group comprising heart, liver, kidney, pancreas, thyroid and skin.

30. (Original) Porcine tissues lacking expression of galactose-α1,3-galactose epitopes.

31. (Original) Porcine tissues according to claim 30 wherein said tissues comprise cells homozygous for the GGTA1 gene, and wherein the said GGTA1 gene is disrupted or rendered non-functional.

32. (Original) Porcine tissues according to claim 30 wherein said tissues comprise cells hemizygous for the GGTA1 gene, and wherein the only single GGTA1 allele is disrupted or rendered non-functional.

33. (Original) Porcine tissues according to claim 30 wherein said tissues comprise cells which are compound heterozygote for the GGTA1 gene, and wherein the said GGTA1 gene comprises two different mutant alleles.

34. (Original) A method of creating a viable GGTA1 null swine comprising selecting GGTA1 null cells, enucleating an oocyte, fusing the oocyte with the said GGTA1 null cell to yield an NT-derived embryo, and implanting the NT-derived embryo into a surrogate mother, wherein the surrogate mother has initiated estrus, but has not yet completed ovulation.

35. (Original) The method according to claim 34 wherein the GGTA1 null cells are derived from a line of porcine fetal fibroblast cells.

36. (Original) The method according to claim 34 wherein the GGTA1 null cells are derived from a clonal population of porcine fetal fibroblast cells.

37. (Original) The method of claim 35 or 36 wherein the porcine fetal fibroblast cells originate from miniature swine.

38. (Original) The method of claim 35 or 36 wherein the porcine fetal fibroblasts cells are heterozygous for a GGTA1 knockout.

39. (Original) The method according to claim 34 wherein the GGTA1 null cells are derived from Q2.

40. (Original) The method according to claim 34 wherein the GGTA1 null cells are derived from Q9.

41. (Original) The method according to claim 34 wherein the GGTA1 null cells are derived from Q32.

42. (Original) The method according to claim 34 wherein the GGTA1 null cells are derived from Q37.

43. (New) The method of claim 8 wherein the porcine fetal fibroblast cells originate from miniature swine.